Press Release

Biggest improvement in global forecasts for ten years

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Better use of satellite observations and new developments in weather information analysis have led to the biggest improvement in The Met. Office's global computer predictions for ten years.

These improvements reinforce The Met. Office's global capability and are the basis for many types of weather forecasts including high-level wind patterns for the aviation industry, and assistance to our armed forces operating overseas.

Forecasters have recently won praise for their detailed support to service personnel operating in the snowy wastes of the Arctic and the flood-devastated regions of Mozambique. Speaking on his return from Mozambique, Wing Commander Bas North, Commanding Officer of the RAF's 33 Squadron of Puma helicopters, said: "The Met. Office guidance was the best forecast around - it gave us exactly what we wanted to fly our missions and plan the next few days ahead."

The accuracy of weather forecasts depends to a large extent on the way the vast array of global weather data is handled by our forecasting models - the software that simulates the complex behaviour of the atmosphere. This has been improved in recent years by a technique known as Three-dimensional Variational Analysis which digests the weather data arriving at The Met. Office for optimum use in the computerised forecasts. The system also allows scientists to easily tap into new types of weather observations as they come on-stream in the future.

One example of the improved use of weather information is the introduction of data from an instrument called an Advanced TIROS Operational Vertical Sounder. This 'eye in the sky' is a part of the NOAA-15 satellite flying 800 km above the earth, and gives a snapshot of the global temperature and humidity structure - a key factor in the development of weather systems.

Welcoming the improved computer forecasts, Peter Ewins, Chief Executive of The Met. Office, said: "These forecasts are at the heart of our business. The substantial investment we have made in recent years is now paying off, and our customers will see real benefits through increased forecast accuracy and improved quality of service."

Notes:

1. A key performance indicator known as the Global Numerical Weather Prediction Index measures global computer forecast accuracy at The Met. Office.

2. Using a base line of 100.0 at 31 March 1995 the Index has risen from 90.9 in 1990 to 116.8 at 31 March 31 2000.

3. The Index has risen 6.9 points over the last 12 months. The biggest rise previously was 6.2 points between 31 March 1995 and 31 March 1996.

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